Chapter 2 - Comment Documents LLNL SW/SPEIS

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CITY OF LIVERMORE

ADMINISTRATION

ADMINISTRATION BUILDING 1052 S. Livermore Avent Livermore. CA 94550-48 Ph: (925) 960-4000 Fax: (925) 960-4058 TDD (925) 960-4104

MAYOR / COUNCIL

CITY MANAGER

CITY ATTORNEY

RISK MANAGEMENT

CITY CLERK 1: 960-4200 • Fax: 960-420.

COMMUNITY DEVELOPMENT

ECONOMIC DEVELOPMENT

FINANCE DEPARTMENT

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1: 454-2361 · Fax: 454-236 LIBRARY 1000 S. Livermore Avenue 1: 373-5500 • Fax: 373-550

HUMAN RESOURCES

POLICE DEPARTMENT 1110 S. Livermore Avenue 1: 371-4900 • Fax: 371-495 TDD 371-4982

PUBLIC SERVICES
3500 Roberton Park Rd.
1900-8000 • Fax: 960-8005
Aipport Driving
65 Ferminal Circle
1273-5280 • Fax: 373-5203
Golf Caurse Drivin
1909 Clubbouse Drive
1273-5290 • Fax: 373-5203
Maintenance Drivin
1500-8000 • Fax: 960-8005
Water Resources Division
101 W. Jack London Blvd.
1960-8100 • Fax: 960-8105 PUBLIC SERVICES

May 20, 2004

Mr. Thomas Grim, Document Manager US Department of Energy/National Nuclear Security Administration Livermore Site Office, L-293 7000 East Avenue Livermore, CA 94550-9234

RE: Draft LLNL SW/SPEIS Comments

Dear Mr. Grim,

The City of Livermore appreciates the opportunity to comment on the Draft Site-Wide Environmental Impact Statement for Continued Operation of Lawrence Livermore National Laboratory (LLNL) and Supplemental Stockpile Stewardship and Management Programmatic Environmental Impact Statement.

The Draft EIS analyzes a Proposed Action and two alternatives: the No Action Alternative and a Reduced Operation Alternative. The No Action Alternative would involve the continued operation of current LLNL programs in support of currently assigned missions relating to the National Nuclear Security Administration's (NNSA) Stockpile Stewardship Program. The Proposed Action would include operations under the No Action Alternative plus new and/or expanded LLNL operations in support of reasonably foreseeable future mission requirements. The Reduced Operation Alternative includes an overall reduction of LLNL activities below the No Action Alternative level.

The City of Livermore offers the following comments on the Draft EIS.

As indicated, the Draft EIS analyzes two alternatives to the Proposed Action: a No Action Alternative and a Reduction Operation Alternative. The EIS Summary discussions relating to the two alternatives indicate that the alternatives would be unable to meet, or only partially meet, objectives of the Stockpile Stewardship 1/08.03 Program. Are there alternatives to the Proposed Action would allow LLNL to meet it's basic mission objectives while reducing, or at least, not increasing, potential environmental impacts over the No Action Alternative? Such alternatives should be considered in the EIS.

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The City requests that the following corrections and updated information be included in the EIS relating to surrounding land uses, Livermore planning programs, aesthetic resources, traffic and transportation.

Surrounding Land Uses

2/09.01

Figure 4.2.1.1-1. - Livermore Site Surrounding Land Uses. Text pages 4.2-3

- The area north of I-580, east of Vasco Road and west of Laughlin Road is primarily Residential, not Rural Residential.
- The area east of Vasco Road and south of East Avenue is Subarea 1 of the City's South Livermore Valley Specific Plan. Single-family residential development by Meritage Homes and Pacific Union Homes (133 units total) is currently underway in this area.
- Subarea 2 of the South Livermore Valley Specific Plan is located south of East Avenue and west of Vasco Road. While a vineyard buffer area is located directly south of East Avenue, a significant portion of this area is under development with single-family residences by Signature Homes and

Figure 4.2.2.1-1. Livermore Site Surrounding Land Use Designations.

The City recently completed a comprehensive update of the General Plan with the adoption of the 2003 General Plan in February 2004. Land use designations for several properties in the vicinity of LLNL have changed as a result of the updated General Plan.

Greenbriar Homes (550 units total) and is approximately 65% complete.

- The land use designation for 38 acres located east of Vasco Road and north and south of Brisa Street was changed from High Intensity Industrial (HII) to Urban High-3 Residential (14-18 units per acre). This site is located adjacent to the Vasco ACE station.
- The Service Commercial area located north of I-580 and east of Herman Avenue is property owned by BART and is planned for future transit oriented development. The area has been redesignated as Urban High-2 Residential (8-14 du/ac), Urban High-3 Residential (14-18 du/ac) and

3/09.02

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3/09.02 cont.

 The area east of Greenville just south of I-580 is now designated as Large Parcel Agriculture (LPA).

 Lawrence Livermore National Laboratory and Sandia National Laboratories are now designated as Community Facilities-Research and Development (CF-R&D).

City of Livermore Planning Programs, Page 4.2-9

 As previously indicated, the City recently completed a comprehensive update of its General Plan. The discussions relating to the City's General Plan on pages 4.2-9 and 4.2-10 need to be updated to reflect current policies and programs.

4/09.03

 The North Livermore Area "A" General Plan Amendment adopted by the City in March 1988 (page 4.2-10) has been incorporated into the updated General Plan and is no longer a separate planning document.

• The update of the Livermore Municipal Airport Master Plan is currently underway. The City Council recently formed an advisory committee to review the proposed draft Master Plan and provide recommendations to the City Council. Completion of the update process, including public review of the draft Master Plan and environmental documents, is tentatively scheduled for the end of 2004.

Aesthetic and Scenic Resources

5/12.01

Page 4.6-4. Policies of the Scenic Route Element of the 1976 General Plan have been incorporated in their entirety into the Community Character Element of the 2003 General Plan. Other visual resource policies of the 1976 General Plan, including amenities designated for preservation as indicated in Table 4.6.1-2, have also been carried forward in the 2003 General Plan.

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Traffic and Transportation

Page 4.13-6 Road Improvements Near the Livermore Site

The Circulation Element of the recently adopted 2003 General Plan identifies several proposed transportation improvements in the vicinity of LLNL. In addition to the Vasco Interchange, improvements are proposed for the Greenville Interchange. Roadway improvements along Vasco Road include widening from four to six lanes between Patterson Pass Road and Las Positas Road and from four to eight lanes between Las Positas Road and 1-580. Along Greenville Road, in addition to improvements near the Union Pacific Railroad, roadway improvements include widening from two to four lanes between Patterson Pass Road and National Drive and from four to six lanes between National Drive and Northfront Road.

The City requests further analysis, clarification and additional information regarding traffic impacts and air quality impacts as discussed below.

Traffic Impacts

6/20.03 The di

The draft EIS has not adequately addressed the traffic impacts of the Proposed Action or the alternatives. The draft EIS reports the expected increase in traffic generated by the Proposed Action (1,100 daily trip increase over the No Action Alternative), but does not distribute the project trips to the roadway network to determine if it causes significant impacts. There are roadways and intersections providing primary access to the Livermore site that have poor levels of service under existing conditions. Specifically, 1-580 near Vasco Road, and Vasco Road near I-580 have existing and forecast future congested traffic conditions. The City requests that the EIS report the following traffic impacts:

- What are the existing and future levels of service on I-580 between First Street and Grant Line Road both with and without the Proposed Action?
- What are the existing and future intersection levels of service along Vasco Road and Greenville Road between I-580 and East Avenue both with and without the Proposed Action?
- What are the impacts of the Proposed Action to I-580, Vasco Road, Greenville Road and the signalized intersections
- What traffic improvements are proposed to mitigate the congested conditions resulting from the Proposed Action?
- What affect does non-auto transportation (e.g. bus, bike, pedestrian, ACE)

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6/20.03 cont. have on reducing auto traffic impacts?

What is the Proposed Action's fair share mitigation costs relating to transportation impacts and what funding is available? The City has calculated an estimated a fair share contribution towards transportation improvements based on information provided in the draft EIS. With an estimated 6.6% of future traffic growth on Vasco Road attributed to the

Proposed Actions, a preliminary fair share contribution for improvements to Vasco Road and the Vasco Interchange is estimated at \$3.1 million. (See Attachment for calculation of fair share contribution.)

Air Quality Issues, Concerns and Questions

The premise of this portion of the review of the Environmental Impact Statement (EIS) is that new or increased levels of activities need not introduce an increased level of hazard to the environment. Expertise and proficiency should accompany both new and increased levels of activity that should lead to lower risk and reduce environmental impact. The following discussion follows the EIS sections that cover the primary topics in air quality issues.

Summary Section S.5.1.10, page 5-12, on Modifications, Upgrades and Decontamination and Decommissioning indicates that over 0.25 million square feet of floor area would undergo decontamination and decommissioning, including facility demolition. In Volume I of the EIS, page 3-22, Table 3.6-1, the only significant non-radiological airborne pollutant described is carbon monoxide. In Section 4.7.5, page 4.7-7, it is indicated that vertical mixing to dilute pollution is not conducive with the topology of the Livermore Valley. In general, the valley is a non-attainment area for compliance with particulate pollution. The number of exceedences has increased each year as seen in Figure 4.10.2-2, page 4.10-11.

7/17.03

- So as not to worsen the problem and meet the BAAQMD "no net increase" provision (Section 4.10.2.1, page 4.10-2), what effects on the outside air quality will occur by the generation of debris particulates (e.g. PM_{2.5} and PM₁₀ listed in Table 4.10.1-1) during the demolition processes?
- How long will the adverse effects last?
- Standard practices are indicated in Section 5.2.8.1, page 5.2-33 (and Appendix B Waste Management), for decommissioning, decontamination and demolition work. Will these activities be

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7/17.03 cont.

8/17.02

- conducted as guided by the "as low as reasonably achievable" (ALARA) principle (Section 4.10.4.5, page 4.10-20)?
- To gauge the appropriate level of regulation consistent with particulate generation (Section 5.1.8.1, page 5.1-6), will there be on-site monitoring of particulate pollution?
- Which respiratory effects are magnified in the general population from an increase in airborne particulates generated by these activities?
- How do these activities differ from the airborne particulates generated by other outside activities in Livermore, e.g. on-going housing developments?

A significant increase in the level of tritium emissions is indicated in Section 5.2.8.2, page 5.2-37.

- Is the proposed increased level of tritium activities leading to an "unavoidable" increase in airborne emission levels of tritium? (See Table and Figure 4.10.5-1, page 4.10-24)
- A high-efficiency particulate air (HEPA) filtration efficiency of 99.97% is given in Appendix N.5.2.3. Can this be improved and why can't the proposed overall increased level of radionuclide activity (solids and gases) be met with constant or reduced airborne waste-emission levels?
- What airborne sources of background radiation exist which yield a dose level 200,000 times greater (as indicated in Section 4.10.5.2 Radiation Doses to the Public, page 4.10-26) that the emissions from LLNL?
- The statistics for comparing radiation dose from LLNL operations versus background sources as listed in Table 4.16.2.1-1, page 4.16-12, do not appear logical. What population base should be used to compare the columns of millirem to person-rem? For example, does the atmospheric MEI dose of 0.12 millirem compare to 0.085 millirem, i.e. a 1.7 person-rem population dose for a population of 20,000?
- Table 4.16.2.2-1, page 4.16-13 indicates a continuing increase in worker dose from a level of 6.9 person-rem in 1998 to a level of 28.0 person-rem in 2002. How does this coincide with a decreased risk versus the general population? Why is the level increasing? Can the level be expected to increase further with the proposed activity levels?
- What activities or efforts will be implemented over the next 10 years to control and minimize the release of toxic materials? What type of monitoring is in place or will be in place relating to potential releases of toxic materials?

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9/26.03

Summary Section S.6.5, page S-24, on Radiological Air Quality indicates that there are differences among the no action alternative, proposed action, and reduced operation alternative. The maximally exposed individual located east of the National Ignition Facility would receive a 30% increase in radiation dose in the proposed action versus the no action alternative. Appendix M.3.1.4 states neutrons from fusion experiments would penetrate the roof of the facility and cause sky shine radiation where neutrons scatter back down to the ground. Other neutrons would interact with structural materials and emit gamma rays that would reach the ground.

 Are better building materials available for use in the roof or structure that would trap the neutrons before escaping into the atmosphere and ground?

Plutonium Administrative Limits and Disposal

10/33.01

The proposed project includes an increase in the plutonium administrative limits from the current 700 kilograms (approximately 1,540 pounds) to 1,500 kilograms (approximately 3,300 pounds) since no pathway for LLNL to dispose of excess plutonium currently exists. The Savannah River facility in South Carolina will not be completed until 2015.

- What is the timing for identifying and implementing appropriate disposal for the excess plutonium?
- Will it be possible for plutonium to be stored at the Savannah River facility before 2015?
- Will the plutonium administrative levels be reduced back to current levels when appropriate disposal has been identified and implemented?

If there are any questions regarding the above, please contact Susan Frost, Principal Planner, at (925) 960-4462.

Sincerely

Dr. Marshall Kamena

Mayor

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cc: City Council members
Linda Barton, City Manager
Marc Roberts, Community Development Director
Tri-Valley CARES

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